From:	Adam Rytenskild
Sent:	12/04/2024 11:25:45 PM
То:	Council Northernbeaches Mailbox
Subject:	TRIMMED: Fwd: 1102 Barrenjoey Rd - NBC DA2022/0469
Attachments:	1102 Barrenjoey Rd - CGC Geotech Assessment Letter - April 2024.pdf;

Begin forwarded message:

From: Adam Rytenskild Subject: Re: 1102 Barrenjoey Rd - NBC DA2022/0469	
Date: 12 April 2024 at 11:22:06 pm AEST	
To:	
Cc:	

Dear Chris, please lodge this update (including the attachment) together with our previous submission.

Thanks Adam

In addition to our submission below, please find attached an expert Geotechnical Assessment by Troy Crozier in relation to the proposed cutting on our boundary.

In relation to the Geotechnical issues, the applicant has failed to address clause 7.7 of the Pittwater LEP and there are serious potential geotechnical risks to my property as outlined in Troy Crozier's assessment.

Please note that.

1. We will not allow any anchoring under our property.

2. It is not clear how the applicant will drill the proposed piles. If they plan to construct a massive piling platform there could be further potential risks. If they do propose to construct one it will take some serious earthworks and there will be real potential for failure of the rig back towards the road or potentially the properties to the south and north of their block.

3. Bill Tulloch's submission (on behalf of the group of neighbours) picks up the clear impracticality of a general arrangement layout that does not seem to allow for

a 'braced support system' - as Troy Crozier identifies;

The proposed length and scale of the excavation will ensure that a braced excavation support system will be very difficult to implement other than to the north-east and south-east corners of the proposed works with the length of the eastern excavation and its depth expected to be too large to allow bracing to this middle section.

There is no viable solution proposed by the applicant.

We ask again for the amendments proposed below be required, or that the appeal be dismissed.

Thank you,

Adam Rytenskild (Troy Crozier cc'd)

On 8 Apr 2024, at 1:26 pm, Adam Rytenskild wrote:

Hi Chris

Please see below.

Thanks Adam

PROPERTY: 1102 BARRENJOEY ROAD, PALM BEACH DA NUMBER: NBC DA2022/0469 APPLICANT: ASIA DIGITAL INVESTMENTS PTY LTD

RESPONDENT: NORTHERN BEACHES COUNCIL PROPOSAL: DEMOLITION & CONSTRUCTION OF A SHOP TOP HOUSING AT 1102 BARRENJOEY ROAD, PALM BEACH

We wish to make this personal submission, in addition to the expert submissions made on our behalf by Bill Tulloch and by Geotechnical expert Troy Crozier.

We remain extremely concerned about this proposed development as the updated design does not adequately address the concerns we raised and would actually have an even more detrimental impact on our property.

The building remains fundamentally too big for the site, which leads to substantial non-compliance. The design squeezes in 5 over-sized luxury dwellings that has the effect of compromising residential neighbour and streetscape environs.

The already approved 2014 design was a height of 12.75RL and the building/excavation was set back 6m from our boundary with a deep planted barrier. This proposal has a height of 13.75RL with a deep excavation and building immediately on our boundary.

We don't agree that Council should make concessions to fundamental compliance criteria because the developer has threatened to build the current approved DA if it doesn't. The controls are put in place for a reason and should be adhered to. The approved 2014 DA is more suitable anyway in that it is lower, has larger setbacks and does not propose a sheer excavation of what is now some 15m deep directly on our boundary. Troy Crozier will provide a separate expert assessment of concerns with the proposed excavation.

We only want a fair outcome that would not only provide a good outcome for the developer, but also for us the neighbours and for the community in this sensitive location.

As a minimum we ask that you please insist on the following amendments

1. No excavation or building on our boundary. This will reduce complexity of the excavation close to our home, improve safety, allow for reasonable separation and for a deep planted barrier. I'm asking for a compromise of a 3m setback to our boundary Vs the 6m setback approved under the current design.

2. Reduce the height to something closer to the currently approved 12.75RL. If the celestry windows are lowered and the hot-water + air-condition equipment is moved off the roof, the extended roof perimmiter could easily be removed to lower the building by 800 to 12.95RL. This would also reduce the visual bulk of the building from the street and Vs Barrenjoey House.

3. Beautify the rooftop. This would benefit all homes viewing this large roof-scape from above, including us, helping the building to blend more into the natural environs when viewed from above. This can be achieved as follows ...

- remove the air-conditioning and hot-water equipment from the roof (this could potentially be accommodated on the carpark level near the bin storage)

- minimise carpark/kitchen exhausts and ensure acoustic and odour barriers are maximised

- install a planted green roof with steeping stone access for any maintenance (a garden roof)

These amendments would soften the impact of this development from all aspects while still providing the developer an opportunity to develop the site, creating a more balanced and fair outcome for all.

Thank you and we're happy to discuss this with any or all of the parties at any time.

Adam and Amanda Rytenskild - 1110 BARRENJOEY ROAD



Crozier Geotechnical Consultants Unit 12/ 42-46 Wattle Road Brookvale NSW 2100

Crozier Geotechnical Consultants a division of PJC Geo - Engineering Pty Ltd

Date: 12 April 2024 No. Pages: 2 Project No.: 2020-232

Development Officer Northern Beaches Council.

Geotechnical Assessment of modified design for proposed development

at 1102 Barrenjoey Road, Palm Beach, NSW

We understand that subsequent to the previous LEC discussions, the developers of 1102 Barrenjoey Road, Palm Beach have submitted a modified design for the new commercial and residential structure. This amended design has been submitted along with updated geotechnical reporting and is being considered by the Council.

As a result, we have reviewed the following new documents to allow assessment of the potential impact on the neighbouring property directly to the east No. 1110 Barrenjoey Road, Palm Beach, for whom we represent:

- 1. Innovate Architects design titled: "Amended Drawings S34 Conference, DA.01 to DA.80, Revision: C, Dated: 22/03/2024.
- JK Geotechnics report titled "REPORT TO REFORM PROJECTS PTY LTD ON UPDATED SEEPAGE ANALYSIS AND GEOTECHNICAL ASSESSMENT (In Accordance with Pittwater Council Risk Management Policy) PROPOSED MIXED USE DEVELOPMENT AT 1102-1106 BARRENJOEY ROAD, PALM BEACH, NSW Date: 22 March 2024 Ref: 33618YJrptrev4C.
- JK Geotechnics report titled "PROPOSED DA CONDITIONS PROPOSED MIXED USE DEVELOPMENT 1102 BARRENJOEY ROAD, PALM BEACH, NSW Date: 20 March 2024 Ref: 33618Ylet4rev

These new reports and documents have been compared to the previous submission for which Crozier Geotechnical Consultants had significant concerns for our client's property. In regard to geotechnical aspects the following is noted:

- The design has been modified and now comprises a single vertical excavation extending almost along the entire eastern boundary fronting onto No. 1110 Barrenjoey Road with the excavation support wall extending along the common property boundary.
- The new Basement Floor level is proposed at RL -0.65 (previously RL -0.615) and will therefore require bulk excavation to approximately RL -1.0 to allow construction of floor slabs etc. As such the excavation will be up to approximately 13.0m depth below No. 1110.

The JK Geotechnics "Proposed DA Conditions" report outlined a series of conditions including:

- "All precautions shall be taken to prevent any damage likely to be sustained to adjoining properties."
- "numerical analysis shall be undertaken to predict the proposed retaining wall displacements and induced settlement below adjoining properties"
- "A monitoring program shall be prepared by a suitably Qualified Chartered (CPEng) Professional Geotechnical Engineer....
- "A retention and excavation methodology shall be prepared to clearly define the proposed retention and excavation techniques that will be adopted during construction"



Geotechnical Concerns:

The now proposed design has extended the excavation to the east, removing the previous 3.0m setback at Basement and Ground Floor level, so that the excavation is now entirely to the common boundary with the neighbouring property to the east (1110). This increased excavation volume and perimeter removes any form of buffer distance between the excavation and the boundary and will now result in a larger portion of 1110 and the structures within it being within the influence zone of the excavation. As such, the proposed design is now considered to have increased risks to 1110 when compared the design submitted previously.

No further geotechnical investigation has been undertaken, is proposed or recommended to be completed to allow confirmation of actual geological and geotechnical conditions along the eastern side of the development, where the greatest proposed excavation retention system will be placed. As such, any design and any numerical analysis will be based on estimations and assumptions, thus making the analysis of limited accuracy to real world conditions. This significantly increases the potential for excess deflection in the retention system and subsequent impact to the neighbouring property and structures to the east, which includes a habitable studio structure within 0.50m of the common boundary.

The proposed length and scale of the excavation will ensure that a braced excavation support system will be very difficult to implement other than to the north-east and south-east corners of the proposed works with the length of the eastern excavation and its depth expected to be too large to allow bracing to this middle section. As such, alternate methods of excavation support will likely be explored including anchoring to the east, for which my client has not indicated approval.

Excavation induced ground movements are known to occur through stress release following removal of confining rock/soil. It is well known that these deflections cannot be prevented even with pre-excavation support systems and will extend beyond the excavation perimeter. The deflections at the centre crest of excavations have been found within areas of Sydney at ratios of between 0.50mm and 2.00mm of lateral deflection, per metre depth of excavation (D). As such, significant deflections in the excavation support system are expected for the 13m deep excavation, especially within the centre eastern boundary where significantly reduced excavation support potential exists. This deflection is likely to propagate upslope allowing ground movement within an area which is located at the base of a slope within a landslide designated area.

The recommended Condition 8 provides allowance for a variation from a piled support wall should the builder/developer identify that the current conditions do not allow for the construction of >13.0m height piles along the eastern boundary due to access restrictions, which are significant. Anchored shotcrete walls will deflect significantly more than a piled support wall therefore increasing the probability of excess deflection at the common boundary and beyond.

Whilst additional geotechnical assessment and recommendations have been provided by the client for submission the amended design now proposed increased excavation depth and reduced buffer to neighbouring properties thus increasing the risk levels to the neighbouring property. No further investigation has occurred to confirm site conditions whilst excavation support systems cannot stop the anticipate deflection and as such lateral movement that will be encountered within a slope designated as being highly susceptible to landslides.

We trust the above comments can be considered by Council in their assessment of the proposed development, if we can be of further assistance in regard to this matter please don't hesitate to contact the undersigned.

Yours faithfully,

Troy Crozier Principal MIE Aust. CPEng (NER)